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The Dragon Research

IN AN ESSAY discussing fantasy, Ursula LeGuin, the distinguished science-fiction novelist, writes about Imagination, Art, and Science as if they were one. We may be startled by this juxtaposition of concepts that our culture assumes are mutually exclusive; we see Science as separate and somehow superior to the non-empirical, "soft" areas of Imagination and Art. Our puritan, profit-oriented, masculine mind-set leads us to reject absolutely the essential human faculty of Imagination.

"We tend as a people," LeGuin writes, "to look upon all works of the imagination either as suspect or as contemptible. Almost all very technological peoples are more or less anti-fantasy."[1]

She goes on to define Imagination as "the free play of the mind, both intellectual and sensory". Play, for her, means 're-creation', an open, fresh approach to the material at hand, material which may have become so familiar that it is accepted as permanently true.

When LeGuin speaks of the "free" play of the mind, she means a spontaneous, unconfined, almost innocent openness, without a preconceived goal and without an immediate object of profit. But she warns us that to be free is not to be undisciplined. To discipline something, whether it is the imagination, the senses, or the intellect, is to train it and to encourage it to grow, mature, and be fruitful. Most of us, however, have been taught to repress, to reject, indeed *to fear* our imagination, and we have never dared either to foster or discipline it.

"The discipline of the imagination may, in fact, be the essential method or technique of both art and science,"[1] LeGuin writes, because imagination is "the recombination of what is known into what is new". Can you think of a better definition of research?

In her musings about why we reject fantasy, LeGuin cites excuses such as, "My wife reads the novels. I haven't got the time." Doesn't this ring a bell? It serves the purpose of sounding very masculine, very important, and at the same time puts down the 'feminine' attribute of romantic musing.

Or we may say, "Fairy tales are for kids. I live in the real world." And we thus deny that innocent openness to newness and even to danger that characterizes the free mind. Could we paraphrase "Fairy tales are for kids" to "Research is for academics. I live in the real world"? After all, we say, "We have to look after patients; we have to make a living."

An editorial in the Fall 1986 issue of our own *Family Medicine Research Update* has stated, "Most family physicians are busy caring for patients and do not have the time, energy, or motivation to take on research projects which they generate. We should not be surprised at this, since the majority of family physicians are in practice for the care of their patients."[2] The error here is in believing that research time is wasted in the practical setting of the real world. I would argue that it is in the real world of practice that research activity has the potential for doing the most good. We are in a unique position as family physicians to observe, listen, accept, record, and interpret the needs of our patients.

Why do we hesitate to do these things? Ursula LeGuin's essay was titled "Why are Americans Afraid of Dragons?" I ask you to consider, "Why are family physicians afraid of the dragon Research?" What holds us back from turning a disciplined but open mind to fresh approaches to knowledge? What monsters do we fear? What is the nature of that fear?

Magee, a philosopher of science, has written that "in the end, most fears, including the most basic, such as fear of the dark, fear of the consequences of our actions, and fear of the future, are forms of *fear of the unknown.*"[3] Perhaps we should be clearer about what our fear of the dragon is based on. I suggest it is primarily based on the fear of the unknown. We are afraid of our ignorance — our ignorance of appropriate research methodology for the practice setting.

If the prime attitudinal problem is fear, and the basis of that fear is the ignorance of methodology, what is the prime methodological problem? I believe that the most difficult and fearsome aspect of research is formulating the research question and formulating it in such a way that should an answer be found, it will have an apparent and reasonably immediate usefulness.

Let us consider the hypothesis statement itself. The more information there is in a hypothesis, the more likely

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it is to be false. Statements with high information content are of lower probability and are more falsifiable than simple propositions, and therefore are far more refutable.

Furthermore, a good question will be based on a problem one actually faces. It is more likely to come out of a problem as it faces us *right now.* Peter B. Medawar, anatomist, Nobel Prize winner, and medical science philosopher, claims, "The great incentive to learning a new skill or supporting discipline is an urgent need to use it."[4] In the day-to-day problem-solving situation of the family practice, we find ever at hand questions that demand investigation and answers. Family-practice research gives us an authentic problem, one to which we have a commitment, a need that asks to be met. Since the question is based on a problem, not on a theory, we can ignore the conventional distinctions between disciplines and allow our imaginations, our creative instincts, our free minds, to come into play.

Our concern is with human beings, unpredictable, unknowable in many ways, but demanding our disciplined, organized, dedicated, and imaginative attention. We can and must "recombine what is known into what is new."

As we think about our research questions, let us heed Ursula LeGuin. "It is by such statements as 'Once upon a time there was a dragon' or 'In a hole in the ground there lived a hobbit', it is by such beautiful non-facts, that we fantastic human beings may arrive, in our own peculiar fashion, at the truth."

Enjoy your dragon hunt! ■

References

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4. Medawar PB. *Advice to a Young Scientist* New York: Harper and Row, 1979.